

## Claims

1. A method of using a back channel containing a multiplicity of identified speech channels from a multiplicity of user sites presented to a speech processing system at a wireline node in a network supporting at least one of cable television delivery and video delivery, comprising the steps of:

receiving said back channel to create a received back channel;

partitioning said received back channel into a multiplicity of received identified speech channels;

processing said multiplicity of said received identified speech channels to create a multiplicity of identified speech content; and

responding to said identified speech content to create an identified speech content response that is unique, for each of said multiplicity of identified speech contents.

2. The method of Claim 1,

wherein at least one of said identified speech channels has an associated user site; and

wherein the step partitioning said received back channel is further comprised of the step of:

partitioning said received back channel into a multiplicity of said received identified speech channels from said associated user site;

wherein the step processing said multiplicity of said received identified speech channels is further comprised the step of:

processing said multiplicity of said received identified speech channels from said associated user site to create a multiplicity of said identified speech

contents; and

wherein the step responding to said identified speech content is further comprised the step of:

responding to said identified speech content from said associated user site to create said identified speech content response for said associated user site.

3. The method of Claim 2,

further comprising at least one member of the collection containing the steps of:

determining said associated user site from said received identified speech channel;

determining said associated user site from said identified speech content;

determining said associated user site from said identified speech content and a speaker identification library;

determining said associated user site from said identified speech content and a speech recognition library; and

determining said associated user site from an identification within said speech channel.

4. The method of Claim 2,

wherein the step responding to said identified speech contents from said associated user site is comprised of the steps of:

processing said identified speech content response to create said identified user site response; and

sending said identified user site response to said identified user site.

5. The method of Claim 2,

wherein the step responding to said identified speech contents from said associated user site is comprised of the steps of:

assessing said speech content response identified as to said user site to create a financial consequence identified as to said user site; and  
5 billing said user site based upon said financial consequence.

6. The method of Claim 2,

wherein the step responding to said identified speech contents from said associated user site is comprised of the steps of:

assessing said speech response to create a financial consequence  
10 identified with said user site;

displaying said financial consequence to create a displayed financial consequence at said user site;

confirming said displayed financial consequence from said user site to create a financial commitment; and

15 billing said user site based upon said financial commitment.

7. The method of Claim 6,

wherein the step responding to said identified speech contents from said associated user site is comprised of the steps of:

identifying a user based upon said speech content identified as to said  
20 user site to create an identified user.

8. The method of Claim 7,

wherein the step identifying said user is comprised of the steps of:

fetching a user profile list based upon said user site, said user profile list containing at least one user profile;

identifying said user based upon said speech content and based upon said user profile list to create an identified user.

9. The method of Claim 8,

wherein the step assessing said speech response is further comprised  
5 of the step of:

assessing said speech response based upon said identified user to create a financial consequence for said identified user.

10. The method of Claim 2,

wherein said speech content response is comprised of a current  
10 response menu and a cumulative user site response is identified as to said user site for at least one of said user sites.

11. The method of Claim 10,

wherein the step responding to said identified speech content from said associated user site further comprising at least one member of the collection

15 comprising the steps of:

responding to said speech content based upon said current response menu and based upon said cumulative user site response to create a new cumulative user site response; and

assessing said speech content based upon said current response  
20 menu and based upon said cumulative user site response to create a new current response menu.

12. The method of Claim 2,

wherein the step responding to said identified speech content from said associated user site is further comprised of the step of:

responding to said speech content identified as to said user site based upon natural language to create a speech content response of said speech content identified with said user site.

13. The method of Claim 2,

5 wherein the step processing said multiplicity of said received speech channels is further comprised for at least one of said user sites is further comprised of the step of:

processing said received speech channels from said user site based upon natural language for said user site to create said speech content  
10 identified as to said user site.

14. A program system controlling at least part of a speech recognition system coupled to a wireline node in a network, said program system comprising the program steps of:

processing a multiplicity of received identified speech channels to  
15 create a multiplicity of identified speech content; and

responding to said identified speech content to create an identified speech content response that is unique to each of said multiplicity of identified speech contents;

wherein said speech recognition system is provided said multiplicity of  
20 received identified speech channels based upon a received back channel at said wireline node from a multiplicity of user sites coupled to said network;

wherein each of said program steps reside in memory accessibly coupled to at least one computer included in said speech recognition system;

wherein said at least one computer communicatively couples through  
25 said wireline node to said multiplicity of user sites; and

wherein said network supports at least one of the collection comprising:  
cable television delivery to said multiplicity of user sites; and video delivery to  
said multiplicity of user sites.

15. The program system of Claim 14,

5 wherein at least one of said identified speech channels has an  
associated user site; and

wherein the program step processing said multiplicity of said received  
identified speech channels is further comprised of the program step of:

processing said multiplicity of said received identified speech channels  
10 from said associated user site to create a multiplicity of said identified speech  
content; and

wherein the program step responding to said identified speech content  
is further comprised of the program step of:

responding to said identified speech content from said associated user  
15 site to create said identified speech content response for said associated user  
site.

16. The program system of Claim 15,

further comprising at least one member of the collection containing the  
program steps of:

20 determining said associated user site from said received identified  
speech channel;

determining said associated user site from said identified speech  
content;

determining said associated user site from said identified speech  
25 content and a speaker identification library;

determining said associated user site from said identified speech content and a speech recognition library; and

determining said associated user site from an identification within said speech channel.

5 17. The program system of Claim 15,  
wherein the program step responding to said identified speech content from said associated user site is comprised of the program steps of:

processing said identified speech content response to create said identified user site response; and

10 sending said identified user site response to said identified user site.

18. The program system of Claim 15,  
wherein the program step responding to said identified speech content from said associated user site is comprised of the program steps of:

assessing said speech content response identified as to said user site  
15 to create a financial consequence identified as to said user site; and  
billing said user site based upon said financial consequence.

19. The program system of Claim 15,  
wherein the program step responding to said identified speech content from said associated user site is comprised of the program steps of:

20 assessing said speech response to create a financial consequence identified as to said user site;

displaying said financial consequence to create a displayed financial consequence at said user site;

confirming said displayed financial consequence from said user site to  
25 create a financial commitment; and

billing said user site based upon said financial commitment.

20. The program system of Claim 19,

wherein the program step responding to said identified speech contents from said associated user site is comprised of the program steps of:

5 identifying a user based upon said speech content identified as to said user site to create an identified user.

21. The program system of Claim 20,

wherein the program step identifying said user is comprised of the program steps of:

10 fetching a user profile list based upon said user site, said user profile list containing at least one user profile;

identifying said user based upon said speech content and based upon said user profile list to create an identified user.

22. The program system of Claim 21,

15 wherein the program step assessing said speech response is further comprised of the program step of:

assessing said speech response based upon said identified user to create a financial consequence for said identified user.

23. The program system of Claim 15,

20 wherein said speech content response is comprised of a current response menu and a cumulative user site response identified as to said user site for at least one of said user sites.

24. The program system of Claim 23,



wherein the program step responding to said identified speech contents from said associated user site is further comprised of at least one member of the collection comprising the program steps of:

responding to said speech contents based upon said current response menu and based upon said cumulative user site response to create a new cumulative user site response; and

assessing said speech contents based upon said current response menu and based upon said cumulative user site response to create a new current response menu.

25. The program system of Claim 15,

wherein the program step responding to said identified speech content from said associated user site is comprised, for at least one of said user sites, of the program step of:

responding to said speech content identified as to said user site based upon natural language to create a speech content response of said speech contents identified as to said user site.

26. The program system of Claim 15,

wherein the program step processing said multiplicity of said received speech channels is further comprised, for at least one of said user sites, of the program step of:

processing said received speech channels from said user site based upon natural language for said user site to create said speech content identified as to said user site.

27. A system supporting speech recognition in a network, said system comprising:

a speech recognition system coupled to a wireline node in said network for receiving a back channel from a multiplicity of user sites coupled to said network, further comprising

a back channel receiver, for receiving said back channel to create a  
5 received back channel;

a speech channel partitioner, for partitioning said received back channel into a multiplicity of received identified speech channels; and

a processor network executing a program system comprised of program steps residing in memory accessibly coupled to at least one  
10 computer in said processor network;

wherein said program system is comprised of the program steps of:

processing said multiplicity of said received identified speech channels to create a multiplicity of identified speech content;

responding to said identified speech content to create an identified  
15 speech content response, for each of said multiplicity of said identified speech contents; and

wherein said network supports at least one of the collection comprising: cable television delivery to said multiplicity of user sites; and video delivery to said multiplicity of user sites.

20 28. The system of Claim 27,

wherein at least one of said identified speech channels has an associated user site; and

wherein partitioning said received back channel is further comprised of:

partitioning said received back channel into a multiplicity of said  
25 received identified speech channels from said associated user site;

wherein the program step processing said multiplicity of said received identified speech channels is further comprised of the program step of:

processing said multiplicity of said received identified speech channels from said associated user site to create a multiplicity of said identified speech content; and

wherein the program step responding to said identified speech content is further comprised of the program step of:

responding to said identified speech content from said associated user site to create said identified speech content response for said associated user site.

29. The system of Claim 28,

wherein said program system is further comprised of at least one of the collection comprising the program steps of:

determining said associated user site from said received identified speech channel;

determining said associated user site from said identified speech content;

determining said associated user site from said identified speech content and a speaker identification library;

determining said associated user site from said identified speech content and a speech recognition library; and

determining said associated user site from an identification within said speech channel.

30. The system of Claim 28,

wherein the program step responding to said identified speech contents from said associated user site is comprised of the program steps of:

processing said identified speech content response to create said identified user site response; and

5 sending said identified user site response to said identified user site.

31. The system of Claim 28,

wherein the program step responding to said identified speech contents from said associated user site is comprised of the program steps of:

assessing said speech content response identified as to said user site  
10 to create a financial consequence identified as to said user site; and

billing said user site based upon said financial consequence.

32. The system of Claim 28,

wherein the program step responding to said identified speech content from said associated user site is comprised of the program steps of:

15 assessing said speech response to create a financial consequence identified as to said user site;

displaying said financial consequence to create a displayed financial consequence at said user site;

confirming said displayed financial consequence from said user site to  
20 create a financial commitment; and

billing said user site based upon said financial commitment.

33. The system of Claim 32,

wherein the program step responding to said identified speech content from said associated user site is comprised of the program steps of:

identifying a user based upon said speech content identified as to said user site to create an identified user.

34. The system of Claim 33,

wherein the program step identifying said user is comprised of the  
5 program steps of:

fetching a user profile list based upon said user site, said user profile list containing at least one user profile;

identifying said user based upon said speech content and based upon said user profile list to create an identified user.

10 35. The system of Claim 34,

wherein the program step assessing said speech response is further comprised of the program step of:

assessing said speech response based upon said identified user to create a financial consequence for said identified user.

15 36. The system of Claim 28,

wherein said speech content response is comprised of a current response menu and a cumulative user site response identified as to said user site for at least one of said user sites.

37. The system of Claim 36,

20 wherein the program step responding to said identified speech content from said associated user site is further comprised of at least one member of the collection comprising the program steps of:

responding to said speech content based upon said current response menu and based upon said cumulative user site response to create a new cumulative user site response; and

assessing said speech contents based upon said current response menu and based upon said cumulative user site response to create a new current response menu.

38. The system of Claim 28,

wherein the program step responding to said identified speech content from said associated user site is comprised, for at least one of said user sites, of the program step of:

responding to said speech content identified as to said user site based upon natural language to create a speech content response of said speech contents identified as to said user site.

39. The system of Claim 28,

wherein the program step processing said multiplicity of said received speech channels is further comprised, for at least one of said user sites, of the program step of:

processing said received speech channels from said user site based upon natural language for said user site to create said speech content identified as to said user site.

40. The system of Claim 28,

wherein said network includes a wired residential broadband network servicing at least part of said multiplicity of user sites.

41. The system of Claim 40,

wherein said wired residential broadband network is a fiber-to-the-curb residential broadband network.

42. The system of Claim 40,

wherein said wired residential broadband network is a fiber-to-the-home residential broadband network.

43. The system of Claim 40,

wherein said wired residential broadband network is a switched-digital-video residential broadband network.

44. The system of Claim 40,

wherein said wireline node is located proximate to a node in said wired residential broadband network.

45. The system of Claim 40,

wherein said wireline node is located proximate to a Headend in said wired residential broadband network.

46. The system of Claim 40,

wherein said wireline node is located proximate to a central office in said wired residential broadband network.

47. The system of Claim 27,

wherein said speech recognition system further comprises a two-dimensional plex communication network communicatively coupled with a two-dimensional array of plex-nodes.

48. The system of Claim 47,

wherein at least one of said plex-nodes is comprised of at least one computer communicatively coupled through said two-dimensional plex communication network to at least one of said multiplicity of user sites;

wherein said computer executes at least one of said program steps  
5 residing in memory accessibly coupled to said computer.

49. The system of Claim 47,

wherein said back channel receiver is implemented in a first of said plex-nodes.

50. The system of Claim 47,

10 wherein said speech channel partitioner is implemented in a second of said plex-nodes.

51. The system of Claim 47,

wherein said two-dimensional communicatively coupled plex-node array and plex communications network contains said processor network.

15 52. The system of Claim 47,

wherein said processor network contains said two-dimensional communicatively coupled plex-node array and plex communications network.

53. A method of operating at least part of a speech recognition system coupled to a wireline node in a network, comprising the steps of:

20 processing a multiplicity of received identified speech channels to create a multiplicity of identified speech content; and

responding to said identified speech content to create an identified speech content response that is unique to each of said multiplicity of identified speech contents;



wherein said speech recognition system is provided said multiplicity of received identified speech channels based upon a received back channel at said wireline node from a multiplicity of user sites coupled to said network;

wherein said network supports at least one of the collection comprising:  
5 cable television delivery to said multiplicity of user sites; and video delivery to said multiplicity of user sites.

54. The method of Claim 53,

wherein at least one of said identified speech channels has an associated user site; and

10 wherein the step processing said multiplicity of said received identified speech channels is further comprised of the step of:

processing said multiplicity of said received identified speech channels from said associated user site to create a multiplicity of said identified speech content; and

15 wherein the step responding to said identified speech content is further comprised of the step of:

responding to said identified speech content from said associated user site to create said identified speech content response for said associated user site.

20 55. The method of Claim 54,

wherein the step responding to said identified speech content from said associated user site is comprised of the steps of:

assessing said speech response to create a financial consequence identified as to said user site;

displaying said financial consequence to create a displayed financial consequence at said user site;

confirming said displayed financial consequence from said user site to create a financial commitment; and

5 billing said user site based upon said financial commitment.

56. The method of Claim 55,

wherein the step responding to said identified speech contents from said associated user site is comprised of the steps of:

10 identifying a user based upon said speech content identified as to said user site to create an identified user.

57. The method of Claim 56,

wherein the step identifying said user is comprised of the steps of:

fetching a user profile list based upon said user site, said user profile list containing at least one user profile;

15 identifying said user based upon said speech content and based upon said user profile list to create an identified user.

58. The method of Claim 57,

wherein the step assessing said speech response is further comprised of the step of:

20 assessing said speech response based upon said identified user to create a financial consequence for said identified user.

59. The method of Claim 54,

wherein said speech content response is comprised of a current response menu and a cumulative user site response identified as to said user site for at least one of said user sites.

60. The method of Claim 59,

wherein the step responding to said identified speech contents from said associated user site is further comprised of at least one member of the collection comprising the steps of:

responding to said speech contents based upon said current response menu and based upon said cumulative user site response to create a new cumulative user site response; and

assessing said speech contents based upon said current response menu and based upon said cumulative user site response to create a new current response menu.

61. The method of Claim 54,

wherein the step responding to said identified speech content from said associated user site is comprised, for at least one of said user sites, of the step of:

responding to said speech content identified as to said user site based upon natural language to create a speech content response of said speech contents identified as to said user site.

62. The method of Claim 54,

wherein the step processing said multiplicity of said received speech channels is further comprised, for at least one of said user sites, of the step of:

processing said received speech channel from said user site based upon natural language for said user site to create said speech content identified as to said user site.

63. The method of Claim 54,

5 further comprising at least one member of the collection containing the steps of:

determining said associated user site from said received identified speech channel;

10 determining said associated user site from said identified speech content;

determining said associated user site from said identified speech content and a speaker identification library;

determining said associated user site from said identified speech content and a speech recognition library; and

15 determining said associated user site from an identification within said speech channel.

64. The method of Claim 54,

wherein the step responding to said identified speech content from said associated user site is comprised of the steps of:

20 processing said identified speech content response to create said identified user site response; and

sending said identified user site response to said identified user site.

65. The method of Claim 54,

25 wherein the step responding to said identified speech content from said associated user site is comprised of the steps of:

assessing said speech content response identified as to said user site  
to create a financial consequence identified as to said user site; and  
billing said user site based upon said financial consequence.

66. The method of Claim 54,

5 wherein each of said identified speech channels has an associated  
user site.